REMARKS

Claims 1-26 are pending and are rejected. Claims 1, 6, 9, 10, 21, and 25 are amended. Claims 3, 5, 7-8, 12-20, 22-24, and 26 are canceled. Reconsideration and allowance of Claims 1-2, 4, 6, 9-11, 21, and 25 are respectfully requested.

Amendments to Specification

Applicants amend the specification to correct clerical errors. No new matter is introduced.

Claim Rejections under 35 USC §103

Claims 1, 2, 5, 7, 8, and 10-26 are rejected under 35 USC §103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0150115 to Onvural et al (hereinafter referred to as Onvural) in view of U.S. Patent 6,895,012 to Amou et al (Amou).

Claims 3 and 4 are rejected under 35 USC §103(a) as being unpatentable over Onvural in view of to Amou and in further view of Lynn et al (The Priority Token Bank in a Network of Queues).

Claims 6 and 9 are rejected under 35 USC §103(a) as being unpatentable over Onvural in view of to Amou and in further view of U.S. Patent 6,011,798 to McAlpine.

Applicant has amended the claims, and discusses the patentability of the amended independent claims over the cited references individually below.

Independent Claim 12

Claims 12-17 are canceled in an effort to advance prosecution of this application, and therefore their rejections are now moot.

Independent Claim 19

Claims 19-20 are canceled in an effort to advance prosecution of this application, and therefore their rejections are now moot.

Independent Claim 24

Claim 24 is canceled in an effort to advance prosecution of this application, and therefore the rejection of Claim 24 is now moot.

Independent Claim 1

Applicants' Claim 1 recites:

A traffic management processor for scheduling packets for transmission across a network, comprising:

a departure time calculator for generating a departure time for each packet;

a departure time prioritizer for comparing the departure times with each other to determine which of the departure times is the earliest, wherein the departure time prioritizer comprises:

a table having a plurality of rows, each for storing the departure time for a corresponding packet; and

compare logic having a plurality of inputs coupled to corresponding rows of the table;

a token generator for generating a token for each packet, wherein the token generator comprises a priority encoder coupled to the compare logic and configured to generate each token in response to a next free address in the table; and

a packet memory for storing a payload for each packet at an address indicated by the packet's token.

None of the cited references, whether taken individually or in combination, disclose or suggest the traffic management processor of Applicants' Claim 1.

More specifically, none of the cited references disclose or suggest a "a token generator for generating a token for each packet, wherein the token generator comprises a priority encoder coupled to the compare logic and configured to generate each token in response to a next free address in the table" and "a packet memory for storing a payload for each packet at an address indicated by the packet's token," as recited in Applicants' Claim 1.

First, the Office Action states that Lynn "teaches the token generator comprising a priority encoder (see Section 3, paragraph 3, lines 1-4)." Applicants disagree.

The section of Lynn referred to by the Office Action states:

> It has been shown that, in a single queue, PTB provides QoS guarantees while providing performance that is significantly better than that provided by static priority and polling-based mechanisms, and nearly as good as CBS.

Thus, the portion of Lynn referred to by the Office Action fails to disclose or suggest "a token generator for generating a token for each packet, wherein the token generator comprises a priority encoder coupled to the compare logic table," as recited in Applicants' Claim 1. Indeed, there in no language in Lynn that discloses or suggests a priority encoder coupled to the compare logic and configured to generate each token in response to a next free address in the departure time table, as recited in Claim 1.

Second, the Office Action states that "Onvural teaches each token comprises a next free address in the table (see paragraph 38, lines 1-3)." That portion of Onvural states that "the index 22 contains information concerning which of the slots contains packets [and] is constructed, in one embodiment, from a number of lookup tables as illustrated in FIG. 5." Thus, Onvural uses the index 22 to determine which slots of the output packet store 20 contain packets, NOT as an address at which to ***store*** departure times in a departure time table and packets in a packet memory. In contrast, the token recited in Applicants' Claim 1 is generated as ***a next free address*** in ***a table that stores departure times*** for the packets, and is also used as an ***address to store the packet*** in a packet memory. Indeed, while Onvural's index 22 is generated from lookup tables of FIG. 5, Applicants' token is generated ***using a priority encoder*** that determines the next free address in the departure time table.

Thus, because none of the cited references, whether taken individually or in combination, disclose or suggest a "a token generator for generating a token for each packet, wherein the token generator comprises a priority encoder coupled to the compare logic and configured to generate each token in response to a next free address in the table" and "a packet memory for storing a payload for each packet at an

address indicated by the packet's token," as recited in Applicants' Claim 1, Claim 1 is patentable over the cited references.

Claims 2, 4, 6, and 9-11 depend from Claim 1 and therefore distinguish over the cited references for at least the same reasons as Claim 1.

Independent Claim 21

Applicants' Claim 21 recites:

A method for scheduling a plurality of packets for transmission across a network, comprising:

generating a token for each packet;

calculating a departure time for each packet;

storing each packet's departure time at a location in a table addressed by the packet's token, wherein the token comprises a next free address in the table;

storing a payload for each packet at a location in a packet memory addressed by the packet's token;

comparing the departure times with each other to determine which departure time is the earliest; and

transmitting the packet corresponding to the earliest departure time.

As discussed above with respect to Claim 1, none of the cited references disclose or suggest generating a token as ***a next free address*** in ***a table that stores departure times*** for the packets, and using the token as an ***address*** to ***store the packet's departure time*** in a departure time table ***and to store the packet*** in a packet memory. More specifically, because none of the cited references, whether taken individually or in combination, disclose or suggest "storing each packet's departure time at a location in a table addressed by the packet's token, wherein the token comprises a next free address in the table" and "storing a payload for each packet at a location in a packet memory addressed by the packet's token," as recited in Applicants' Claim 21, Claim 21 is patentable over the cited references.

Claim 25 depends from Claim 21 and therefore distinguishes over the cited references for at least the same reasons as Claim 21.

CONCLUSION

In light of the above remarks, it is believed that Claims 1-2, 4, 6, 9-11, 21, and 25 are in condition for allowance and, therefore, a Notice of Allowance of 1-2, 4, 6, 9-11, 21, and 25 is respectfully requested. If the Examiner's next action is other than allowance as requested, the Examiner is requested to call the undersigned at (408) 236-6646.

Respectfully submitted,

/William L. Paradice III/

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Dated

William L Paradice III
Attorney for Applicant
Reg. No. 38,990